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UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

UTHERVERSE GAMING LLC,

Plaintiff,

v.

EPIC GAMES INC.,

Defendant.

Case No. C21-799-RSM-TLF

ORDER RE: CLAIMS CONSTRUCTION

I.   INTRODUCTION

This matter comes before the Court on the parties' briefs regarding Claim Construction. Dkts. #72 and #76. Oral argument was held on August 16, 2022, pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995). Having reviewed all of the parties' briefing, and having considered the arguments and evidence presented in the *Markman* Hearing, the Court makes the following rulings regarding the patent claim terms at issue.

II.   BACKGROUND

Plaintiff Utherverse Gaming LLC ("Utherverse") alleges Defendant Epic Games has infringed four of its patents: United States Patent Nos. 8,276,071 ("071 Patent"); 8,812,954 ("954 Patent"); 9,123,157 ("157 Patent"); and 9,724,605 ("605 Patent").

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Utherverse is a company involved in the creation and maintenance of virtual online worlds. The inventions at issue were developed by Brian and Gary Shuster, two brothers, and their colleague Aaron Burchin. Dkt. #1 at 1.

Epic Games is a video game and software developer that publishes games, including *Fortnite*, that can be played on a broad array of different platforms and operating systems. As alleged in the Complaint, "more than 350 million participants are registered players of Fortnite, with tens of millions of participants collectively logging billions of hours of gameplay each month." *Id*. at 3. Utherverse claims that "to accommodate so many participants in the same virtual world for virtual social events and concerts, Epic uses the inventions claimed by the Asserted Patents." *Id*.

The '071, '954, and '157 patents share a substantively identical specification and relate to multi-instance, multi-user animation platforms ("MMAP"). These MMAP patents purport to solve problems related to constraints on the number of players who can access multiplayer virtual worlds—online spaces with players interacting with each other. The MMAP patents' purported solution is to make copies of a particular space within the virtual world, such as a virtual nightclub, so different groups of players can experience their own copy of the space.

Unlike the first three patents, the purported invention of the '605 patent is a method of playing back a recorded experience in a virtual environment, where the player can navigate that recorded experience and interact with other players doing the same.

Earlier in this litigation Epic Games moved to dismiss arguing these claims are for abstract ideas unpatentable under 35 U.S.C. § 101 and A*lice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208 (2014)*.* The Court denied this Motion and proceeded to the claims construction phase. *See* Dkt. #57.

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The parties submitted a Joint Claim Construction and Prehearing Statement that identified certain claim terms in dispute, found in various places in all three patents. Dkt. #63. The parties also submitted a chart containing the following proposed constructions:

Term	Utherverse's Construction	Epic's Construction
Avatar	A computer-generated representation of a character in a virtual environment.	A computer-generated figure in a virtual environment that represents and is operated by a human player.
Common Space	A defined (i.e. bounded) area or portion of multiple dimensions that provides for simultaneous (i.e., real-time) interactions with multiple parallel dimensions/instances.	A defined area or portion of a virtual environment that is visible and/or audible to avatars located in multiple parallel dimensions of a separate area or portion of the virtual environment.
Initial scene state	An initial state of a scene including at least a position and orientation of objects in a virtual world.	Scene state information, including at least a position and orientation of objects, including avatars, rendered in the scene at a beginning of a time period of a new recording of a scene.
Modeling	Numerically describing objects and spatial relationships.	Defining the positions of a set of points such that they form the shape of an object or space that can be rendered.
Multi-dimensional avatar	An avatar capable of existing in more than one dimensions/instances.	An avatar present in two or more parallel dimensions of a virtual space.
Parallel dimension/ Parallel instance	Simultaneously existing dimensions in a virtual reality universe, each of which are originally duplicates or recognizable counterparts of one another.	Indefinite.
Recorded experience [file]	[Data representative of] a scene, including an initial scene state and changes to that scene over time, which can later be rendered to allow for real-time interaction in a newly instantiated scene.	[A file containing] a recording of a prior experience that occurred in a virtual environment.
Video inserted	Plain and ordinary meaning.	A separately recorded successive series of images that is inserted into the scene as video playback.

Dkt. #63-1.

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1. 071 Patent

The 071 Patent is titled "Multi-Instance, Multi-User Animation Platforms" (MMAP) and was issued on September 25, 2012. Dkt. #1-4. Utherverse alleges Epic infringed "at least" Claim 8 of the 071 Patent. Claim 8 depends on Claim 1 and incorporates Claim 1. Claim 1 states:

> A method for managing a multi-instance, multi-user animation process, comprising: modeling, using a computer, a plurality of parallel dimensions in a computer memory, each of the plurality of parallel dimensions being a replica of a modeled three dimensional space configured for modeling occupancy and movement of multiple avatars within limits that are defined by at least one model of a three dimensional object;
>
> assigning ones of a plurality of avatars within the computer memory so that each of the plurality of avatars populates a respective one of the parallel dimensions and each of the plurality of parallel dimensions is populated by a unique subset of the plurality of avatars, so as to prevent over-population of any one of the parallel dimensions by avatars; and
>
> animating ones of the plurality of avatars populating different ones of the parallel dimensions in response to input from respective corresponding ones of the plurality of clients to provide virtual-reality data, using the computer, the virtual-reality data configured to enable clients to output an animated display of a corresponding one of the parallel dimensions and avatars populated therein.

Dkt. #1-4 at 19-20. Claim 8 of the 071 Patent states:

> The method of claim 1, further comprising modeling a common space in the computer memory configured in relation to the plurality of parallel dimensions so that at least one object located inside the common space is visible from view-points located inside each of the plurality of parallel dimensions.

Id. at 20.

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2. 954 Patent

The 954 Patent is titled "Multi-Instance, Multi-User Virtual Reality Spaces" and was issued on August 19, 2014. Dkt. #1-5. Plaintiff alleges that defendant infringed "at least" Claim 4 of the 954 Patent. Claim 4 incorporates Claim 1. Claim 1 of the 954 Patent states:

> A method, comprising:
>
> modeling in a computer memory, multiple parallel instances of a multi-dimensional virtual reality space, each of the plurality of parallel instances replicating the multi-dimensional virtual reality space;
>
> assigning ones of a plurality of modeled multi-dimensional avatars within the computer memory so that each of the plurality of avatars populates a respective one of the parallel instances and each of the plurality of parallel instances is populated by a unique subset of the plurality of avatars, wherein the assigning limits a total number of the plurality of avatars in each of the unique subsets; and
>
> generating an additional parallel instance of the multi-dimensional virtual reality space, based on detecting an increase in a number of plurality of client devices providing input to the modeling for controlling ones of the plurality of modeled multi-dimensional avatars.

Dkt. #1-5 at 19-20. Claim 4 states:

> The method of claim 1, further comprising modeling a common space in the computer memory configured in relation to the plurality of parallel instances so that at least one object located inside the common space is visible from view-points located inside each of the plurality of parallel instances.

Id. at 20.

3. 157 Patent

The 157 Patent is titled "Multi-Instance, Multi-User Virtual Reality Spaces" and was issued on September 1, 2015. Dkt. #1-6. Plaintiff alleges that defendant infringed "at least" Claim 1 of the 157 Patent. Claim 1 states:

> A method comprising:

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modeling, in a computer memory, multiple parallel instances of a multi-dimensional virtual reality space, each of the plurality of parallel instances replicating the multi-dimensional virtual reality space;

assigning ones of a plurality of modeled multi-dimensional avatars within the computer memory so that each of the plurality of avatars populates a respective one of the parallel instances and each of the plurality of parallel instances is populated by a unique subset of the plurality of avatars, wherein the assigning limits a total number of the plurality of avatars in each of the unique subsets; and

modeling a common space in the computer memory configured in relation to the plurality of parallel instances so that at least one object located inside the common space is visible from viewpoints located inside each of the plurality of parallel instances.

Dkt. #1-6 at 19.

4. 605 Patent

The 605 Patent is Titled "Method, System and Apparatus of Recording and Playing Back an Experience in a Virtual Worlds System" and was issued on August 8, 2017. Dkt. #1-7. Plaintiff alleges that defendant infringed "at least" Claim 2 of the 605 Patent, which incorporates Claim 1. Claim 1 states:

A method of playing back a recorded experience in a virtual worlds system, comprising:

instantiating, using one or more processors of a server, a new instance of a scene, the new instance being defined by data stored in memory, at least one client device displaying and participating in the new instance;

retrieving a recorded experience file from the memory, the recorded experience file having been generated by saving an initial scene state and saving subsequent changes and respective times during a time period of the recorded experience;

playing back the recorded experience file by rendering for display by the at least one client device, objects of the initial scene state in the new instance, including one or more avatars and rendering updates to the initial scene state based on the subsequent changes over the time period; and

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> automatically transporting the one or more avatars to a different new instance of the scene, upon occurrence of a threshold event, wherein the threshold event comprises when a maximum capacity of avatars has been reached in the new instance of the scene.

Dkt. #1-7 at 16. Claim 2 states:

> The method of claim 1, wherein movement within the new instance by the one or more avatars associated with at least one client device is limited by objects of the recorded experience.

Id.

Claim 17 of the '605 patent states in part, "one or more servers instantiating a new instance of a scene.… wherein the new instance comprises video inserted into the new instance of the scene.…" *Id.* at 17.

III.   LEGAL AUTHORITY

A. Claim Construction Principles

Patent claim construction is a question of law for the Court, even if the case is designated to go to a jury trial, but it may have underlying factual determinations that are now reviewed for clear error. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837, 190 L. Ed. 2d 719 (2015); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996). After the claims have been properly construed, the fact-finder will compare the claims to the allegedly infringing product or process. The comparison is conducted on an element-by-element basis.

When interpreting claims, a court's primary focus should be on the intrinsic evidence of record, which consists of the claims, the specification, and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314-17 (Fed. Cir. 2005) (en banc). The Court should begin by examining the claim language. *Id.* at 1312. Claim language should be viewed through the lens of a person of "ordinary skill in the relevant art at the time of the invention." *SanDisk Corp. v.*

Memorex Prods., Inc., 415 F.3d 1278, 1283 (Fed. Cir. 2005). A court should give the claim's words their "ordinary and customary meaning." *Phillips*, 415 F.3d at 1312-13 (quotation omitted). In construing a claim term's ordinary meaning, the context in which a term is used must be considered. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003).

However, the claims "must be read in view of the specification, of which they are a part." *Phillips*, 415 F.3d at 1315 (quoting *Markman*, 52 F.3d at 979. Additionally, the doctrine of claim differentiation disfavors reading a limitation from a dependent claim into an independent claim. *See InterDigital Commc'ns, LLC v. Int'l Trade Comm'n*, 690 F.3d 1318, 1324 (Fed. Cir. 2012). The specification can offer "practically incontrovertible directions about a claim meaning." *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009). "When consulting the specification to clarify the meaning of claim terms, courts must take care not to import limitations into the claims from the specification." *Id.* "[A]lthough the specification may well indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into claims when the claim language is broader than such embodiments." *Tate Access Floors, Inc. v. Maxcess Techns., Inc.*, 222 F.3d 958, 966 (Fed. Cir. 2000) (quotation omitted). "By the same token, the claims cannot enlarge what is patented beyond what the inventor has described in the invention." *Abbott Labs.*, 566 F.3d at 1288 (internal quotation omitted). "Likewise, inventors and applicants may intentionally disclaim, or disavow, subject matter that would otherwise fall within the scope of the claim." *Id.* at 1288.

In addition to the specification, a court should consider the patent's prosecution history, which consists of "the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. However,

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because the prosecution represents an "ongoing negotiation" rather than the "final product" of the negotiation, "it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* Consulting the prosecution history can, however, be helpful in determining whether the patentee disclaimed an interpretation during prosecution. *Research Plastics, Inc. v. Federal Packaging Corp.*, 421 F.3d 1290, 1296 (Fed. Cir. 2005). "Under the doctrine of prosecution disclaimer, a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution." *Purdue Pharma L.P. v. Endo Pharm. Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006); *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) ("The purpose of consulting the prosecution history in construing a claim is to 'exclude any interpretation that was disclaimed during prosecution.'").

Although courts are permitted to consider extrinsic evidence, like expert testimony, dictionaries, and treatises, such evidence is generally of less significance than the intrinsic record. *Phillips*, 415 F.3d at 1317 (citing *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Extrinsic evidence may not be used "to contradict claim meaning that is unambiguous in light of the intrinsic evidence." *Id*. at 1324.

"A patent is invalid for indefiniteness if its claims, read in light of the patent's specification and prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2123 (2014). "Indefiniteness is a legal determination; if the court concludes that a person of ordinary skill in the art, with the aid of the specification, would understand what is claimed, the claim is not indefinite." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1381 (Fed. Cir. 2015) (citation omitted) (finding the challenged claim term not indefinite). Patents are presumed valid, and a challenger must prove invalidity by clear and convincing

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evidence. *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003). If a single claim limitation is indefinite, the entire claim is invalid.

B. 071, 954 and 157 Patent Terms for Construction

1. "Avatar"

The first claim term in dispute is "Avatar." The Patents expressly distinguish between "an automated entity or person" and "avatars," which are operated by human players: the "player's avatar may interact with an *automated entity or person*, simulated static objects, or *avatars operated by other players*." 071 patent at 1:42-45; 605 patent at 1:30-32 (emphasis added).

The claims themselves make clear that avatars are operated by human players. Claim 1 of the 071 patent, for example, requires that the "avatars" are "animat[ed] . . . in response to input from respective corresponding ones of a plurality of clients." 071 patent at 18:63-66. In this context, the "clients" are the devices used by players, such as a personal computer or cell phone, to interact with the virtual world. *See* 071 patent at 6:29-34, 7:26-30, 7:49-52. Input from the "client" is therefore synonymous with input from a human player. *See id*. Similarly, claim 2 of the 605 patent describes that "movement within the new instance by the one or more avatars associated with at least one client device is limited by objects of the recorded experience." 605 patent at 10:59-62. Again, the client device is operated by a human player, so the avatars are as well. *See id*. at 7:13-17.

The only thing Utherverse points to in the intrinsic record to support its proposed construction are two passing references in the MMAP patents to a "robot avatar" and a reference in the 605 Patent to a "bot avatar." *See* Dkt. #76 at 10 (citing the 071 and 605 patents).

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The Court agrees with Epic and its expert that "[a] robot avatar is no more a 'type' of avatar than a 'robot child' would be a 'type' of child, or a plastic flower would be a 'type' of flower—each of these terms describe artificial facsimiles of the real thing they represent." Dkt. #72 at 9. The adjective "robot" in the patents does not water down the definition of avatar to the point of including non-player characters, it merely reads as an oxymoron reasonably interpreted by one skilled in the art as a non-player character rather than an avatar. To conclude otherwise would be to disregard the extensive references in the patents above to how the avatars are operated by a human player. On this basis alone the Court could find in favor of Epic. The Court also finds that Utherverse's construction is inconsistent with how an ordinary artisan would understand the term "avatar," a ubiquitous term used in gaming for decades. The Court therefore adopts Epic's construction of this term for all the patents at issue in this case, including the 605 Patent.

   2.   *Common Space*

Both sides agree that a "space" is a defined area or portion of a virtual environment, but dispute what it means for a space to be a "common space." The parties agree that this is a term coined by the inventors. "Idiosyncratic language, highly technical terms, or terms coined by the inventor are best understood by reference to the specification." *Intervet Inc. v. Merial Ltd.*, 617 F. 3d 1282, 1287 (Fed. Cir. 2010).

The intrinsic record states that "[in] an embodiment of the inventions, a defined area or portion of multiple dimensions may be visible to, and/or interact with, other parts or members of the dimensions." '071:5:24-26. The specification otherwise clearly provides the basis for the Utherverse Gaming construction. The intrinsic record is clear as to the meaning and manner of

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interaction with the common space. The Court need not look to the extrinsic record and will adopt Utherverse's construction.

3. Modeling

The Court agrees with Epic that Utherverse's definition of modeling is "overly broad because it encompasses virtually every aspect of computer graphics." Dkt. #72 at 16. These patents use the term "modeling" not to refer to the creation of a model by an artist during software development, but rather the process of defining the model in computer memory (*i.e.*, defining the positions of a set of points that constitute the "model") when the virtual world is running. Epic's construction more closely aligns with the patent language. *See Id*. at 17. Utherverse's objections to Epic's construction are unconvincing given the expert reports and how modeling versus texturing has been defined in the claims and in the art. The Court adopts Epic's construction.

4. Multi-Dimensional Avatar

The Court adopts the construction found in a clear reference in the patents: an avatar "that has a multi-instance presence in more than one dimension." 071 patent at 5:54-55; 954 patent at 5:54-55 ("In both of the foregoing examples, the performer and the clerk provide examples of an object—e.g., an avatar—that has a multi-instance presence in more than one dimension."). Considering the briefing and oral argument, the parties have presented no valid reason to deviate from this clear description in the specification.

5. Parallel Dimension/Parallel Instance

These terms are used interchangeably by the patents. The Court construes "parallel dimension" and "parallel instance" as expressly defined in the specification: "a duplicate or recognizable counterpart of a bounded, computer-modeled space that is accessible via a

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common environment." 071 patent at 13:37-39. The Court declines to find this term indefinite at this time.

C. 605 Patent Terms for Construction

1. *Initial Scene State*

The parties' constructions are very similar, if worded differently, except that Epic's construction includes the position and orientation of avatars. The Court will adopt Epic's construction, which incorporates verbatim the 605 patent's express definition: "[t]he initial scene state includes at least a position and orientation of objects, including avatars, rendered in the scene at a beginning of a time period of a new recording." 605 patent at 6:7-9. Although both parties argue that Epic's construction improperly *requires* the presence of avatars, the Court does not read it that way. Avatars may simply be included.

2. *Recorded Experience [file]*

Epic argues that, based on the intrinsic record, a "recorded experience" must be from a prior experience rather than a display allowing for real-time interaction.

During prosecution, the inventors expressly disclaimed any interpretation of "recorded experience" that would include "new gameplay":

> Thus, the instant invention allows users to participate in past events (in other words, travel back in time) and participate in a recorded experience. However, the participants cannot modify the recorded experience file by the actions or events occurring during the playback of the file. This is significantly different from Chimes, which provides for new gameplay beginning at a target point, and modification of the gameplay subsequent to the target point.

Dkt. #73 ("Martino-Weinhardt Decl."), Ex. H (11/7/2016 Applicant Remarks) at 9.

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The Court agrees with Epic that Utherverse's proposed construction runs afoul of this disclaimer by encompassing new gameplay. The Court finds that Epic's construction offers at least some insight into the claim scope and therefore adopts it.

3. *Video Inserted*

Utherverse argues for the plain and ordinary meaning of this term, and the Court agrees. The meaning and scope of this term is readily apparent even to lay persons.   Epic's construction pointlessly breaks down the term "video" to mean a "recorded successive series of images" and uses the term "inserted" to help construe "inserted."   The Court may properly resolve a dispute "by declining to adopt [Defendants'] construction and giving the terms their plain and ordinary meaning." *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1325-26 (Fed. Cir. 2012). Such is the case here.

D. **Whether the Preambles are Limiting**

"Generally, the preamble does not limit the claims." *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002) (citation omitted). Absent an indication that a preamble gives "life, meaning, and vitality" to a claim, it should not be construed as an affirmative limitation. *See Pitney Bowes, Inc. v Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999).

In a nutshell, Epic argues that the Court needs to find the preambles limiting because they use terms like "computer," "memory," and "computer processor coupled to a memory" without indicating that the activities in the patent must be performed by the same computer.

Utherverse argues these should be given their plain and ordinary meaning and that the preambles should not be construed as limiting these patents to situations involving a single

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computer. After considering the briefing of the parties and arguments at the hearing, the Court agrees with Utherverse and declines to rule that the preambles are limiting.

IV.   CONCLUSION

This Court has construed the disputed claim terms in this case as set forth above, and the Clerk is directed to send a copy of this Order to all counsel of record.

DATED this 20th day of October, 2022.

RICARDO S. MARTINEZ
UNITED STATES DISTRICT JUDGE

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